Amendments to Claims

1. (Currently Amended) A phenanthroline derivative having Formula I, ~

$$(R^2)_y$$

$$(R^1)_x \qquad\qquad (R^1)_x \qquad\qquad (I)$$
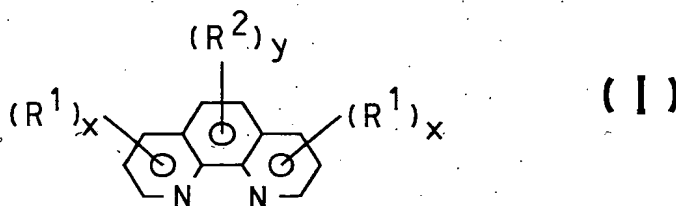
wherein:

R^1 and R^2 are the same or different at each occurrence and are selected from

H, F, Cl, Br, alkyl, heteroalkyl, alkenyl, alkynyl, aryl, heteroaryl, $C_nH_aF_b$, $OC_nH_aF_b$,

$C_6H_cF_d$, and $OC_6H_cF_d$;

  a, b, c, and d are 0 or an integer such that $a+b = 2n + 1$, and $c + d = 5$,

  n is 1-20;

  x is ~~0 or~~ an integer from 1 through 3;

  y is 0, 1 or 2;

  wherein at least one R^1 is selected from substituted phenyl and substituted

biphenyl having at least one substituent selected from F, $C_nH_aF_b$, $OC_nH_aF_b$,

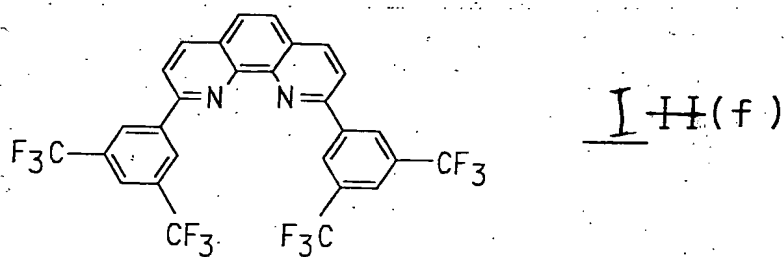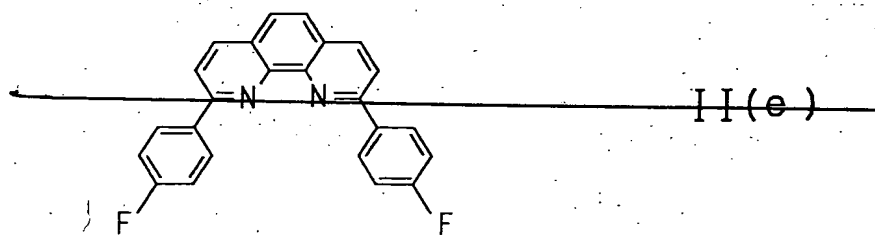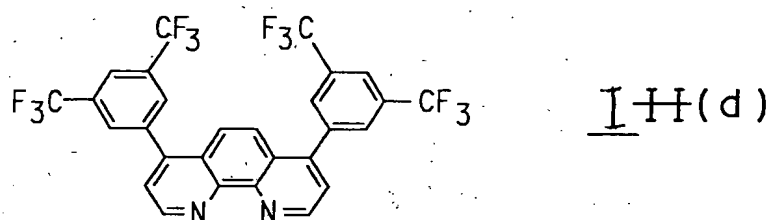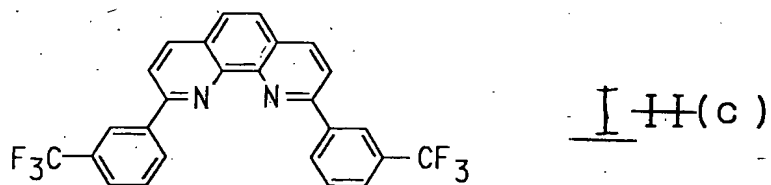$C_6H_cF_d$, and $OC_6H_cF_d$, wherein b and d are integers;
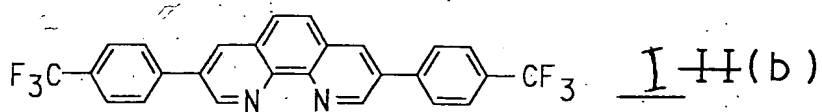
  with the proviso that when x is 1, both R^1 are not C_6H_4F.

2. (Currently Amended) The ~~composition~~ derivative of Claim 1, wherein R^1 is

selected from phenyl, substituted phenyl, biphenyl, substituted biphenyl, pyridyl,

substituted pyridyl, bipyridyl, and substituted bipyridyl.

3. (Currently Amended) The ~~composition~~ derivative of Claim 2, wherein R^1 is

selected from substituted phenyl, substituted biphenyl, substituted pyridyl, substituted

bipyridyl having at least one substituent selected from alkyl, heteroalkyl, aryl,

heteroaryl, arylalkylene, heteroarylalkylene, $C_nH_aF_b$, and $C_6H_cF_d$.

4. (Cancelled)

5. (Currently Amended) A phenanthroline derivative selected from Formulae

I(b) through I(d) and I(f)

F_3C—⟨phenyl⟩—⟨phenanthroline⟩—⟨phenyl⟩—CF_3 III(b)

⟨phenanthroline with two 3-CF₃-phenyl substituents⟩   III(c)

F_3C ... CF_3 / F_3C ... CF_3 ⟨phenanthroline structure⟩   III(d)

⟨phenanthroline with two 4-F-phenyl substituents⟩   III(e)

⟨phenanthroline with two 3,5-bis(CF₃)-phenyl substituents⟩   III(f)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)